

Anthrax Postexposure Antibiotic Prophylaxis Guidelines and Dosing for Adults and Children

The information on page one of this document is excerpted directly from the October 19, 2001 CDC *Morbidity and Mortality Weekly Report* article entitled "Investigation of Anthrax Associated with Intentional Exposure and Interim Public Health Guidelines, October 2001." The tables on page 2 give detailed dosing information for children.

Table 1: Interim recommendations for postexposure prophylaxis for prevention of inhalational anthrax after intentional exposure to *Bacillus anthracis**

Category	Initial Therapy	Duration
Adults (including pregnant woman & immunocompromised persons)	Ciprofloxacin 500 mg po BID or Doxycycline 100 mg po BID	60 days
Children	Ciprofloxacin 10-15 mg/kg po Q12 hrs* or Doxycycline: >8 yrs and >45 kg: 100 mg po BID >8 yrs and ≤45 kg: 2.2 mg/kg po BID ≤8 yrs: 2.2 mg/kg po BID	60 days

*Ciprofloxacin dose should not exceed 1 gram per day in children.

Postexposure prophylaxis is indicated to prevent inhalational anthrax after a confirmed or suspected aerosol exposure. When no information is available about the antimicrobial susceptibility of the implicated strain of *B. anthracis*, initial therapy with ciprofloxacin or doxycycline is recommended for adults and children (Table 1). Use of tetracyclines and fluoroquinolones in children has adverse effects. The risks for these adverse effects must be weighed carefully against the risk for developing life-threatening disease. As soon as penicillin susceptibility of the organism has been confirmed, prophylactic therapy for children should be changed to oral amoxicillin 80 mg/kg of body mass per day divided every 8 hours (not to exceed 500 mg three times daily). *B. anthracis* is not susceptible to cephalosporins or to trimethoprim/sulfamethoxazole, and these agents should not be used for prophylaxis.

Pediatric Anthrax Postexposure Antibiotic Dosing [✦]

CIPROFLOXACIN

(available in tablets of 100, 250, and 500 mg and in oral suspensions of 500 mg/5ml and 250 mg/5ml)

Weight	Recommended Dosage 10-15 mg/kg q 12h	500 mg/5 ml suspension (Dosage in ml q 12 h)	250 mg/5ml suspension (Dosage in ml q 12 h)
>75 lbs	500 mg	5.0 ml	10.0 ml
60-75 lbs	400 mg	4.0 ml	8.0 ml
45-59 lbs	300 mg	3.0 ml	6.0 ml
30-44 lbs	200 mg	2.0 ml	4.0 ml
22-30 lbs	150 mg	1.5 ml	3.0 ml
15-21 lbs	100 mg	1.0 ml	2.0 ml
11-15 lbs	75 mg	0.75 ml	1.5 ml
7-10 lbs	50 mg	0.5 ml	1.0 ml
4-6 lbs	30 mg	0.3 ml	0.6 ml

DOXYCYCLINE

(available as 50 and 100 mg tablets and capsules and 50 mg/5ml syrup and 25 mg/5 ml suspension)

Weight	Recommended Dosage 2-2.5 mg/kg q 12 h	50mg/5ml syrup (Dosage in ml q 12 h)	25 mg/5 ml suspension (Dosage in ml q 12 h)
>90 lbs	100 mg	10.0 ml	20 ml
80-89 lbs	90 mg	9.0 ml	18 ml
70-79 lbs	75 mg	7.5 ml	15 ml
60-69 lbs	65 mg	6.5 ml	13 ml
50-59 lbs	55 mg	5.5 ml	11 ml
40-49 lbs	45 mg	4.5 ml	9 ml
30-39 lbs	35 mg	3.5 ml	7 ml
27-29 lbs	30 mg	3.0 ml	6 ml
22-26 lbs	25 mg	2.5 ml	5 ml
18-21 lbs	20 mg	2.0 ml	4 ml
13-17 lbs	15 mg	1.5 ml	3 ml
8-12 lbs	10 mg	1.0 ml	2 ml
5-7 lbs	5 mg	0.5 ml	1 ml

[✦] Developed by Dr. Bruce Chandler, Medical Officer for the Municipality of Anchorage Department of Health and Human Services.